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August 20, 2014

Mr. Dick Bachelder Infiltrator Systems, Inc. 4 Business Park Road P.O. Box 768 Old Saybrook, CT 06475

Dear Mr. Bachelder:

Infiltrator Systems, Incorporated requested that the Virginia Department of Health (VDH) consider extending General Approval for Treatment Level 2 (TL-2) to the Infiltrator Advanced Treatment Leachfield (ATL System). This request was based upon documentation submitted which indicates that the ATL System has been tested in accordance with NSF/ANSI Standard 40 protocol, that the results of this testing meet the requirements for Class I effluent under Standard 40, and that the ATL System is currently certified and listed by NSF as a Standard 40 system.

The ATL System is a patent-pending, proprietary system with effluent distributed through the system by way of a proprietary conduit. The proprietary ATL conduit is nominally 12 inches in diameter and is manufactured in 10-foot lengths. The ATL proprietary conduit is connected into rows and placed upon the surface of the "system sand". The system sand is a minimum of 6 inches deep below the conduit, with a minimum of 6 inches adjacent to each ATL conduit row. There is no system sand on top of the ATL conduit rows; instead it is to be covered with a six inches minimum cover of appropriate soil. Third-party testing has demonstrated that the effluent meets Standard 40 Class I treatment requirements upon exiting the 6 inch system sand layer below the ATL conduit. This system is not rated for vehicular traffic over the unit.

General Approval for TL-2 is extended to the ATL System when designed and installed as tested under NSF. This approval is based on the following required design components.

- (1) Pre-treatment is provided with a septic tank that complies with the Virginia *Sewage Handling* and *Disposal Regulations* (12 VAC5-610).
- (2) The maximum septic tank effluent loading rate of 150 gallons per day per 70 linear feet of ATL conduit is not exceeded.
- (3) The design provides for a minimum of 6 inches of specified system sand below and adjacent to the ATL conduit rows.
- (4) Trench bottom and soil dispersal area requirements specified in the approved "Design and Installation Manual for the ATL System in Virginia" (dated August 2014) are followed.
- (5) Vertical separations to limiting features are measured from the bottom of the 6 inch system sand layer under the conduit.

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The General Approval extends only to systems with a rated capacity of less than or equal to 1,000 gallons per day. NSF lists the ATL-450 as the only approved 'model'. However, VDH recognizes that the product is not sold as specified models and the approved design manual instructs a designer how to match the system size to the design flow and soil conditions. Therefore the unit may be used to produce TL-2 effluent for design flows up to and including 1,000 gpd when designed in accordance with the approved design and installation manual.

If you have additional questions on this issue, please feel free to contact me at (804)387-1883 or by email at <a href="Marcia.Degen@vdh.virginia.gov">Marcia.Degen@vdh.virginia.gov</a>. A copy of this letter and the submitted manual will be posted on the VDH website.

Sincerely,

Marcia J. Degen, Ph.D., P.E.

Technical Services Administrator Division of Onsite Sewage, Water Services Environmental Engineering & Marina Programs

Marcia J. Dogen

Cc. Dwayne Roadcap, Division Director John Schofield, P.E., Technical Services Engineer